

PERPILOT, V.A., inzhener; KHAN, A.V., inzhener.

How to get the most out of RSA-12 electric shearing machines. Nauka
i pered.op.v sel'khoz. 7 no.7:71-72 Jl '57. (MLRA 10:8)
(Sheep shearing)

PERFILOVA G.B.

20-5-34/60

AUTHOR

SHORYGINA, N.N. and PERFILOVA, G.B.

TITLE

Conversion of Levoglucosan into Aromatic Compounds.

(O prevrashchenii levoglukosana v aromaticheskiy)

(soyedineniyu.- Russian)

PERIODICAL

Doklady Akademii Nauk SSSR 1957, Vol 114, pp 1040-1042

(U.S.S.R.)

ABSTRACT

Transition from carbohydrates to carbocyclic compounds was first brought about by Michael. He obtained dimethyl-tetraoxycyclohexane through the influence of silver upon 1,6-diiodo-dimethylene-mannite when heating to 165-170°C for 8 hours. The first successful experiment concerning the conversion of carbohydrates into aromatic compounds was realized by the first author and P.P. Shorygin. From influence of metallic sodium in liquid ammonia on trimethyl-leve-glucosan there resulted phenol with a 34% yield. A conversion system (cited here) was that time proposed by the authors. It is based upon the decomposition of simple ether compounds by metallic sodium. The present paper represents a continuation of the last-mentioned investigation, for the purpose of further studying this interesting reaction. Here, too, phenol (31%) was obtained as chief product of the reaction.

CARD 1/2

L 53373-65 ENT(1)/EFC(b,-2) L P(t)
ACCESSION NR: AP5013726

UR/0070/65/010/003/0427/0428
548.0:536

19

18

13

AUTHOR: Perfilova, V. E.; Sonin, A. S.

TITLE: The experimental detection of the Kerr effect in crystals without central symmetry.

SOURCE: Kristallografiya, v. 10, no. 3, 1965, 427-428

TOPIC TAGS: Kerr effect, electrooptical photography, crystal symmetry, crystal syngony

ABSTRACT: The experimental detection and investigation of the square law electro-optical effect (the Kerr effect) requires its separation from the linear effect. This makes it necessary to find such directions of applied field and light propagation so that the variations in the optical indicatrix produced by the linear effect are absent. These directions can be found by comparing the variations in the optical indicatrices produced by the external field due to linear and square law effects. Information is presented on the directions of light and external electric field required to observe the Kerr effect in crystals of monoclinic, rhombic, tetragonal, trigonal, hexagonal and cubic syngony. "We wish to thank A. P. Lyubimov

Card 1/2

L 58373-65
ACCESSION NR: AP5013726

and I. S. Rez for reviewing these results."

ASSOCIATION: none

SUBMITTED: 04Oct64

NO REF Sov: 001

ENCL: 00

SUB CODE: SS, OP

OTHER: 000

Card 2/2
XL

L 57570-65
ACCESSION NR: AP5016131

5

"quadratic" electro-optical effect is involved. Some hysteresis was observed. This may be due either to a parasitic effect of surface charges or to hysteresis of the elasto-optical effect. The transmission increased most rapidly with the applied field at temperatures very near the Curie point; the change was much less rapid at only a few degrees above or below the Curie point. "In conclusion, we express our gratitude to I.S.Zheludev, L.G.Lomova and I.S.Rez for discussing the results of the work, and to I.A.Slepkov and M.P.Kalitina for assistance with the experiment." Orig.art.has: 2 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: 00

NR REF Sov: 001

ENCL: 00

SUB CODE: SS, OP

OTHER: 008

I. 54931-65 EPA/EWT(1)/EWT(m)/EWP(w)/EWP(f)/EWG(v)/EWP(v)/EPR/T-2/EWP(k)
EPA(bb)-2 Pe-5/Pt-4/Ps-4/Pw-4 WH/EM/GS UR/0000/65/000/000/0086/0093
ACCESSION NR: AT501z065 45
41
61
33

AUTHOR: Perfilov, V. G., (Engineer)

TITLE: Improving the performance of a turbocharged engine by turbocompressor
regulation

SOURCE: Kolomenskiy teplotovozstroitel'nyy zavod. Turboporoshnevyye dvigateli
(Turbine-piston engines); sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1965, 86-93

TOPIC TAGS: turbocompressor regulation, turbocharged engine, synchronized blade
pitch control, staggered blade pitch control, bladed diffuser, bladed turbine nozzle,
engine performance/ChN 30/38 engine

ABSTRACT: The limited operating range of the turbocharged engine model ChN 30/38,
initially equipped with a free turbocompressor employing an axial two-stage turbine, was
expanded by substituting a specially designed turbocompressor with a radial centrifugal
turbine, a centrifugal compressor and adjustable blading in the turbine nozzle and the
compressor's diffuser. Reliable operation of the roller bearing mounted blade pitch control
mechanism was assured by increasing the end play in the blades to 6% of channel width.
Use of unbladed diffusers in the centrifugal compressor was ineffective. Multistage blade
pitch control offered the advantage of simpler design, but synchronized control (i.e. a

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L 54931-65
ACCESSION NR: AT5912965

4
system governed by supercharging pressure) provided better performance. The use of a controllable turbocompressor permitted engine operation over the entire design range, improved operating economy and minimized heat stressing of components of the cylinder group. Results of stand tests are presented graphically. "The turbine and compressor characteristics were determined by laboratory engineers A. A. Aksenov, N. S. Bulgakov and G. I. Ivanov; tests on the Chl 30/38 motor were carried out under the direction of B. N. Dogadin." Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 06Jan65

NO REF SOV: 003

ENCL: 00

OTHER: 000

SUB CODE: PR

Card 2/2

MORGULIS, P.S.; PERFILOV, V.G.; KRUGLOV, M.G., doktor tekhn.
nauk, prof., red.

[Turbochargers for diesel locomotive engines] Turbo-
kompressory teplovoznykh dvigatelei. Moskva, Mashino-
stroenie, 1965. 146 p.
(MIRA 18:7)

PERFILOV, V.G., inzh.; KARPOV, A.F.

A new turbocompressor for a 3,000 hp. diesel locomotive engine.
Energomashinostroenie 9 no.1:27-29 Ja '63. (MIRA 16:3)
(Compressors) (Diesel locomotives) (Diesel engines)

IVANOV, G.I., inzh.; PERFILOV, V.G., inzh.

Increase of the operational range of a centrifugal compressor.
Energomashinostroenie 7 no. 5:36-38 My '61. (MIRA 14:8)
(Compressors)

20515
S/114/61/000/005/003/003
E194/E435

26.2120

AUTHORS: Ivanov, G.I., Engineer and Perfilov, V.G., Engineer

TITLE: Extending the Working Range of a Centrifugal Compressor

PERIODICAL: Energomashinostroyeniye, 1961, No.5, pp.36-38

TEXT: This article describes results obtained at the Kolomenskiy zavod im. V.V.Kuybysheva (Kolomna Works imeni V.V.Kuybyshev) in studying the possibility of extending the working range of a centrifugal compressor by a method which combines adjusting the angle of the blades of the stationary guide vanes and adjusting the angle of the inlet section of the diffuser blades. In this way the compressor range could be increased by a factor of more than 3 without appreciable loss of head or efficiency. The working range of a centrifugal compressor is limited in the low flow region by intensive breakaway of the air flow in the diffusers. At high throughputs the compressor output is limited by the flow capacity of the guide vanes and diffusers. The working range of the compressor δ is defined as the difference between the maximum and minimum referred air flows divided by the minimum flow. The works has designed and manufactured a compressor intended for use

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Card 1/ 8

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Extending the Working Range ...

in the gas turbine supercharger of a diesel engine. The compressor has two control mechanisms, one being alteration of the angle of the stationary guide vanes and the other being rotating inlet sections of the diffuser blades. Constructional features of the experimental compressor are shown in Fig.1. The stationary guide vanes with rotating blades are indicated in the figure by the number (10). The blades are made of aluminium alloy and rotate in bronze guides (16) in the inlet duct. Each diffuser blade is made in two parts, a rotating tip (26) and a stationary part (25). The stationary part of the blade is made as a unit with the diffuser disc (24). The blade tips can rotate about their axes, to each axis (22) a tooth wheel (21) is attached which is driven from a toothed ring (19). By altering the position of this ring, the angle of the blade tips can be adjusted. Tests were run on the compressor and the results are plotted in the graphs of Fig.2, 3 and 4. The notation used is: π_k and η_{ad} - the compression ratio and adiabatic efficiency; H_{ad} - the head. Fig.2 gives the compressor characteristics when controlled only by the diffuser blades ($\alpha_1 = 0$; $\Delta\alpha_3 = -5^{\circ}30'$, $-4^{\circ}00'$, 0 , $+4^{\circ}00'$, $+5^{\circ}30'$). It will be seen that turning the tips through an angle

Card 2/8

20515

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E194/E435

Extending the Working Range ...

of $\pm 5^{\circ}30'$ has little influence on the efficiency or head, and with the tips in the neutral position the range $\delta = 35.8\%$. When the tips are rotated the range $\delta = 93.6\%$, thus it has been increased almost threefold. Fig.3 gives compressor characteristics when controlled only by the stationary guide vanes at the compressor intake ($\Delta\alpha_3 = 0$; $\alpha_1 = -32^{\circ}$, -24° , -13° , 0 , $+13^{\circ}$, $+24^{\circ}$). In this case extension of the working range of the compressor to 90.2% by setting up a positive swirl in the air flow is accompanied by an appreciable drop (7 to 8%) in the compression ratio because the amount of work delivered to the air by the runner is reduced. The development of negative swirl reduces the adiabatic efficiency (by 7 to 9%) because of increased losses in the runner. Fig.4 shows compressor characteristics with simultaneous control by both methods and shows that in this way the working range can be increased up to 110%, the drop in adiabatic efficiency and head is 6 to 7% (α_1 and $\Delta\alpha_3$ are respectively: -24° and $-5^{\circ}30'$; -24° and $-3^{\circ}30'$; 0 and 0 ; $+24^{\circ}$ and $+3^{\circ}30'$; $+24^{\circ}$ and $+5^{\circ}30'$). From the standpoint of achieving a wide working range, the combined method of control is effective. However, the construction of the control mechanisms is complicated and for most practical purposes the

Card 3/8

Extending the Working Range ...

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E194/E435

necessary range can be achieved by use of diffuser control alone.
There are 4 figures and 1 Soviet reference.

Card 4/8

s/871/62/000/000/001/002
E075/E492

AUTHORS: Gavrilov, B.G., Perfilov, V.N.
TITLE: Catalytic conversions of the mixtures of isomethylene
and naphthenic hydrocarbons on aluminosilicates
SOURCE: Nizkotemperaturnyye kataliticheskiye prevrashcheniya
uglevodorodov. Ed. by V.D.Piastro. (Leningrad)
Izd-vo Leningr. univ., 1962. 76-81

TEXT: The above conversions were investigated qualitatively and quantitatively at 300°C and 35 to 56 atm. The hydrocarbon mixtures were obtained by treating solar and kerosene distillates with H₂SO₄ and urea to remove aromatic and normal hydrocarbons. The liquid hydrocarbons were heated in autoclave with an activated gumbrin clay (clay-hydrocarbon ratio 1:1) for 10 hours. The hydrocarbons were partly converted into aromatic compounds. The quantities of benzene, toluene, xylene, ethylbenzene amounted to 4% for the solar distillate and 2.6% for the kerosene distillate respectively. The conversion of n-hexadecane indicated that the aromatization of saturated hydrocarbons on aluminosilicates passes through a stage of primary cracking of the feed with the formation of olefins and paraffins of smaller molecular weight than

Card 1/2

Catalytic conversions ...

S/871/62/000/000/001/002
E075/E492

the original molecules. Subsequent dehydrogenation of the olefins gave aromatic hydrocarbons. This mechanism was supported further by the absence of naphthalenes in the conversion products of n-hexadecane. There are 3 tables.

Card 2/2

PERFILOV, V.P.

Role of cerebral angiography in the diagnosis of ontogenic abscesses
of the temporal lobe ["Otolaryngologia Polska," No.2, 1960]. Zhur. ush.
nos. i gorl. bol. 21. no. 4:83 J1-Ag '61. (MIA 15:1)
(DIAGNOSIS, RADIOGRAPHIC) (BRAIN ABSCESS)

SHKORBATOV, S.S.; SVESHNIKOVA, G.I.; PERFILOVA, A.P.

*Studying the magnetic properties of rocks in the Monchegorsk
region. Vest. LGU 19 no.12823-31 '64 (MIRA 1788)*

SHKORBATOV, S.S.; PERFILOVA, A.P.

Structure of the main gabbro intrusion in the Monche and Chuna
tundras. Uch. zap. LGU no.324:337-341 '64.
(MIRA 18:4)

D. R. KLOVA, G. V.

Transformation of levoglucosan into aromatic compounds.
S. N. Shorygin and V. M. L'vova, N. D. Zelinskii Inst.
Org. Chem., Moscow, *Trudy Akad. Nauk SSSR*
114, 1040-2 (1957), cf. Shorygin et al., *CA* 54, 10029 -
Adding Na to levoglucosan in liquid NH₃. Keeping
the mixt. overnight in the cold, sealing the ampul, and
keeping the mixt. at room temp. until the blue color was
destroyed yielded after 3-18 days 60-8% PhOH. If the
mixt. is shaken the reaction is complete in 3 days. The
yield of PhOH is proportional to the amt. of Na used to a
max. of 8 atoms/mole glucosan. If the initial cold period
of the reaction is shortened, the reaction is completed more
rapidly but the yield of PhOH declines. Some *o*- and *m*-C₆
H₅(OH)₂ may be isolated from the reaction mixts. in addition to PhOH.
G. M. Korchagin //

SHCHUKAREV, S.A.; PERFILOVA, I.L.

Interaction of vanadium trichloride with sodium, potassium, and
rubidium chlorides. Zhur.neorg.khim. 8 no.9:2106-2108 S '63.
(MIRA 16:10)

SHCHUKAREV, S.A.; VASIL'KOVA, I.V.; PERFILOVA, I.L.; CHERNYKH, L.V.

Enthalpy of vanadium trichloride formation. *Zhur.neorg.khim.* 7 no.7:
1509-1511 J1 '62. (MIRA 16.3)
(Vanadium chloride) (Heat of formation)

PERFILOVA, I.L.; KOZLOVA, I.V.; SHCHUKAROV, S.A.; VASIL'KOVA, I.V.

Enthalpy of vanadium oxychloride formation. Vest LGU 16
no.16:130-135 '61. (MIRA 14:8)

(Vanadium chloride)
(Enthalpy)

PERFILOVA, O.

Are glaciers a cause or a consequence of the change in the climate?
Tekhnika 31 no.9:5-7 '63. (MIRA 16:9)
(Glaciology) (Climate)

REZNIK, N.F.; KARAVAYEV, I.I.; GRISHIN, K.S.; PERFILOVA, S.P.

Purification of sewage. Put' i put.khoz. 7 no.7:19-20 '63.
(MIRA 16:10)

GRISHIN, K.S., inzh.; PERFILOVA, S.P., inzh.

Purification of phenol containing waste waters of washing and
steaming stations. Vest.TSNII MPS 20 no.5:48-51 '61.

(MIRA 14:8)

(Sewage--Purification)

L 18762-66 EWT(m)/ENP(w)/T/ENP(t) IJP(c) JD
ACC NR: AP6003769

SOURCE CODE: UR/0181/66/008/001/0107/0110

AUTHORS: Perfilova, V. E.; Sopin, A. S.

ORG: none

TITLE: Electrooptical properties of single crystals of barium titanate

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 107-110

TOPIC TAGS: barium titanate, single crystal, electrooptic effect, ferroelectric crystal, paraelectricity, temperature dependence, uniaxial crystal

ABSTRACT: In view of the importance of the practical application of ferroelectric single crystals for the modulation of light, the authors have investigated the quadratic electrooptical effect of single crystals of BaTiO_3 in the paraelectric phase, as functions of the temperature and of the wavelength of the light. An examination of the equation for the optical indicatrix shows that application of the

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L 18762-66
ACC NR: AP6003769

electric field should cause the crystal to become uniaxial, with the principal axes of the deformed indicatrix coinciding with principal axes of the undeformed indicatrix. This was checked with a crystal in the form of a disc 3 mm in diameter and 0.5 mm thick placed in a special thermostat between crossed polaroids in such a way that the principal axes of the indicatrix were at angles $\pm 45^\circ$ to the axes of the polaroids. The light source was a monochromator (UM-2) and the indicator was a photomultiplier (PEU-19M). A path difference of one-half wavelength was attained at field intensities 6.6 -- 8.8 kv/cm. The quantity $(R_{11} - R_{12})n_0^3$, which is a measure of the induced birefringence BaTiO₃, decreased linearly with the temperature (R_{11} and R_{12} are the constants of the quadratic electrooptical effect). The results indicate that the crystals are subject to a fourth-order electrooptical effect. The measurements were made at 4100 Å, but the electrooptical effect is almost independent of the wavelength. Its variation with the voltage was also studied and found to be parabolic. Further information on the effect can be obtained by investigating the linear electrooptical effects near the Curie point on the ferro-

2/3

L 18762-66

ACC NR: AP6003769

electric phase side. Authors thank I. S. Zheludev, A. S. Vasilevskaya,
I. S. Rez, and A. P. Lyubimov for a discussion and Ye. G. Fesenko
for supplying the samples. Orig. art. has: 5 figures and 5 formulas.

5
SUB CODE: 20/ SUBM DATE: 01Jul65/ OTH REF: 004

Card

3/3 Sm

I 40959-66 EWT(m)/T WE

ACC NR: AR6019464 (A)

SOURCE CODE: UR/0081/66/000/002/P019/P019

AUTHOR: Perfilova, V. P.

TITLE: Relative performance of methods of reducing the organic sulfur compound content in reactive fuels

SOURCE: Ref zh. khim., Part II, Abs 2P149

REF SOURCE: Tr. molodykh uchenykh. Saratovsk, un-t. Vyp. khim., Saratov, 1965, 125-132

TOPIC TAGS: organic sulfur compound, fuel refining, petroleum fuel, adsorption, silica gel

ABSTRACT: An evaluation of the adsorption, alkaline and sulfuric acid methods of refining reactive fuels is given. Results of refining TS-1 fuel (total S content 0.100%) showed that the most effective of the enumerated methods is adsorption purification using active sorbents--synthetic silica gels and aluminosilica gels brands KSM, ASM and MSK, and also certain natural adsorbents. Optimum conditions for purification by adsorption are sorbent ground to 0.25-0.50 mm and a fuel input rate of 1 hr^{-1} . Under these conditions it is possible to reduce the S content in the initial fuel by 78-85%. Bibliography 17 title. A. N. [Translation of abstract].

SUB CODE: 07, 21

Card 1/1 hs

L 42107-65 EPP(c)/EMT(m)/T Pr-4 WE
ACCESSION NR: AT5008634

8/2933/64/007/004/0200/0204

28

AUTHORS: Gikht, B. M.; Gryazev, N. N.; Karyakin, V. Ya.; Larinov, I. V.;
Myakushina, S. M.; Perfilova, V. P.; Orlov, S. Y.; Shchitikov, V. K.

27

B+1

TITLE: Dependence of adsorptive catalytic desulfurization of diesel fuel on a catalyst surface

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya sotsorganicheskikh soyedineniy,
soderzhashchikh syla v neftyakh i naftoproduktakh, v. 7, 1964, 200-204

TOPIC TAGS: desulfurization, catalyst, adsorption, diesel fuel, surface active agent, sulfur, hydrocarbon/ silica gel, KSM silica gel

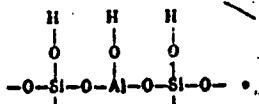
ABSTRACT: The relative activities of various catalytic agents and adsorbents in adsorptive-catalytic purification of diesel fuels from organic sulfur compounds were studied experimentally. The specific adsorption surfaces and their pore sizes were determined by the adsorption isotherms of various hydrocarbons and organic acids. The adsorbent-catalysts were mostly alumosilicates, an alumogel, a silica gel, and bauxite. For synthetic as well as natural alumosilicates, the specific desulfurization rate remained constant. The specific activity of bauxite was high, but that of the alumogel and the silica gel were low. It was shown that

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ACCESSION NR: AT5008634

the major role played by the alumosilicate catalysts in diesel fuel desulfurization could be attributed to the complex



During desulfurization, coke and other organic sulfur compounds were deposited on the surface of the catalyst and reduced the effective catalytic area. This requires special regeneration of the contaminated surfaces. Orig. art. has: 2 tables, 1 figure, and 1 formula.

ASSOCIATION: Saratovskiy politekhnicheskiy institut, Saratovskiy naftopererabatyvayushchiy zavod im. S. M. Kirova (Saratov Polytechnic Institute, Saratov Petroleum Refining Plant)

SUBMITTED: 00

EGL: 00

SUB CODE: 00, 77

DO KW Sov: 013

OTHER: 000

Conf 2/2 C.C.

ACC NR: AR6033757

SOURCE CODE: UR/0081/66/000/018/P012/P013

AUTHOR: Perfilova, V. P.; Gryazev, N. N.; Dmitriyeva, K. A.; Samonina, N. A.; Ozerskaya, L. Ye.

TITLE: Removal of sulfur compounds from jet fuels by a sorption

SOURCE: Ref. zh. Khimiya, Part II, Abs. 18P90

REF SOURCE: Sb. Issled. protsessov adsorbts. i katalitich. chistki nefteproduktov v prisutstvii porist. tel. No. 1. Saratov, Saratovsk. un-t, 1965, 35-38

TOPIC TAGS: jet fuel, sulfur compound removal, adsorption, silica gel, organic sulfur compound, FUEL CONTAMINATION

ABSTRACT: A study has been made of the removal of sulfur compounds from TS-1 jet fuels with silica gel. The experiments were conducted on adsorption columns filled with 0.25—0.50 mm particles of ASM silica gel activated at about 200C. The fuels were fed in the column at a rate of 1 vol fuel/1 vol adsorbent per hour. The thermal stability of the fuels was evaluated by oxidation in a LSART-59 apparatus. The composition of sulfur compounds was determined potentiometrically by the method of I. A. Rubinshtein and Z. A. Kleymenova (Metody analiza org. soyedineniy nefti, na smesey i proizvodnykh [Analytical methods for determining organosulfur compounds, their mixtures, and derivatives in petroleum]. M., Uzd. AN SSSR). This method makes it possible to determine mercaptan and bisulfide sulfur with an accuracy of up to

Card 1/2

ACC NR: AR6033757

0.002%. Analysis of the initial fuels and of fuels treated for 6 hr with silica gel showed that TS-1 fuels contain sulfur mainly in the form of sulfides and residual sulfur. The content of bisulfides is very low. At 20C silica gel readily adsorbs mercaptans and residual sulfur. The content of bisulfides remained almost unchanged. ASM silica gel can be used without regeneration for 3 hr. Its adsorption capacity can be fully restored by treatment with steam. The adsorbent loses its activity toward sulfur compounds, in particular, mercaptans, after two regenerations.

SUB CODE: 21/ SUBM DATE: none/

Card 2/2

PERFIL'YEV, A.A.

Quality of treatment of complicated and uncomplicated caries as revealed by X-ray data. Stomatologija 37 no.6:58 N-D '53 (MIRA 11:12)

1. Iz Ivanovskogo oblastnogo otdela zdravookhraneniya.
(DENTISTRY)

S/073/63/029/001/004/009
A057/A126

AUTHOR: Perfil'yev, A.I.

TITLE: Thermodynamic data on the chlorination of tin compounds and study of the chlorination of pure-tin compounds

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 1, 1963, 21 - 25

TEXT: Free energies of the chlorination of tin and its compounds with different reagents were calculated to accomplish thermodynamic data of the chlorination of tin containing products. Literature data on the pyrolysis of magnesium chloride under conditions of chlorination (700 - 850°C) were also verified. Free energies of the chlorination reactions were calculated for 298, 800 and 1,200 K, but in this paper only values for 1,200 K are given. The calculated results indicate: Tin oxide can be chlorinated with Cl₂, NH₄Cl, ZnCl₂, and CaCl₂ in the presence of a reducing agent. In oxidizing atmosphere tin oxide reacts with gaseous HCl in the presence of ferrous oxide. The most suitable reagent for the chlorination of industrial products containing small quantities of tin is aqueous

Card 1/2

BEVZ, Nikolay Sidorovich; PERFIL'YEV, Andrey Il'ich; CHERNYSHOVA,
Yelena Vladimirovna [deceased]; CHISTOKLETOV, Grigoriy
Fedorovich; VOROTNIKOVA, N.V., red.

[Geography of Voronezh Province; textbook for grade 8]
Geografiia Voronezhskoi oblasti; uchebnoe posobie dlia
8-kh klassov. Izd.2., ispr. i dop. Voronezh, Tsentral'noe
chernozemnoe knizhnoe izd-vo, 1965. 81 p. (MIMA 19:1)

LYAKH, O.D.; SHEKA, I.A.; PERFIL'YEV, A.I.

Reaction of germanium dioxide with ammonia and urotropine
in aqueous solutions. Zhur.neorg.khim. 10 no.8:1822-1826
Ag '65. (MIRA 19:1)

1. Laboratoriya instituta obshchey i neorganicheskoy khimii AN
UkrSSR. Submitted October 8, 1964.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9

IN: PHU, Lien, V. (Vinh Linh) - Vietnamese Communist Party, Central Committee, General Secretary

Address: 100 Pham Ngan Street, Hanoi, Vietnam

2. IN: Phu, Lien, V. (Vinh Linh)
Subject: Vietnamese Communist Party, Central Committee, General Secretary

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9"

PERFIL'YEV, A.I.

Thermodynamic data on the chlorination of tin compounds and the
study of the chlorination of pure compounds of tin. Ukr.khim.zhur.
29 no.1:21-24 '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, laboratorii
v Odesse.

(Tin compounds) (Chlorination)

• PERFIL'YEV, A.I. (Voronezh); RUBINSHTEYN, Ye.S.; SIGOV, M.M. (Sverdlovsk);
ZAKUDI, Ye.O. (Ufa); SUKHOCHUKOVA, A.V. (g. Yuzhno-Sakhalinsk)

Editor's note. Geog. v shkole 25 no.3 62-65 My-Je '62. (MIRA 15:7)

1. Zavoduyushchiy kabinetom geografii Primorskogo krayevogo
instituta naoverahonatvovaniya uchitely (for Rubinshteyn).
(Geography--Study and teaching)

PERFIL'YEV, A. I.

Dissertation for degree of
Candidate Geographical Science

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240030002-9"

PERFIL'YEV, A. I.

14-57-7-14225

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 7 (USSR)

AUTHOR: Perfil'yev, A. I.

TITLE: Practical Activities for Secondary School Pupils
Studying Economic Geography of the USSR (Prakticheskiye
raboty po ekonomicheskoy geografii SSSR v sredney
shkole)

PERIODICAL: Uch. zap. Krasnodarsk. gos. ped. in-ta, 1956, Nr 18,
pp 77-96

ABSTRACT: The author recommends various basic practical activi-
ties which students should undertake both during
classes in the economic geography of the USSR and as
out-of-class activities. They should read, compare
maps (particularly economic and geographical ones),
draw simple maps and cartograms, acquire experience in
interpreting and preparing graphic visual aids, work

Card 1/2

14-57-7-14225
Practical Activities for Secondary School Pupils (Cont.)

with natural exhibits and collections, study newspapers, read both specialized and popular scientific literature, prepare outlines for articles and lectures, and take lecture notes.
Card 2/2

PEKIL'EV, A.I.--

"The Subtropical zone of Krasnodar by Kras." Cand
Geog Sci, Tbilisi State U, Krasnodar, 1954. (v.1-3, 1954)

Survey of Scientific and Technical Dissertations Defended at
USSR Higher Educational Institutions (18)

SO: Sum. No. 481, 5 May 55

KARACHENTSEV, S.G.; MOLDAVANTSEV, Yu.Ye.; PERFIL'YEV, A.S.

New data on the stratigraphy of metamorphic formations of the axial
band in the Arctic Ural Mountains. Biul. MOIP. Otd. geol. 39 no.1:
49-56 Ja-F '64. (MIRA 18:4)

ZHURAVLEV, V.S.; PERFIL'YEV, A.S.; KHERASKOV, N.P. [deceased]

Spatial and temporal relationship between "uralides" and
"pre-uralides" in the eastern margin of the Russian Plat-
form. Biul.MOIP.Otd.geol. 40 no.5:106-130 S-0 '65.
(MIRA 18:11)

MOLDAVANTSEV, Yu.Ye.; PERFIL'YEV, A.S.

Evidence of metamorphism with relation to the deep fault in the
Polar Urals. Izv.AN SSSR.Ser.geol. 27 no.4:50-55 Ap '62.
(MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut
(VSEGEI), Leningrad i Geologicheskiy institut AN SSSR, Moskva.
(Ural Mountain region--Metamorphism)
(Ural Mountain region--Faults (Geology))

PERFIL'YEV, A.S.

Western boundary of the Ural-Tau anticlinorium in the Polar Urals.
Dokl.AN SSSR 145 no.3:635-638 Jl '62. (MIRA 15 :7)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom
A.L.Yanshinyem.
(Ural-Tau region--Geology, Structural)

PERFIL'YEV, A.S.; MOLDAVANTSEV, Yu.Ye.

Example of noncorrespondence between metamorphism and stratigraphy
(Polar Urals). Dokl.AN SSSR 132 no.6:1395-1398 Je '60.
(MIRA 13:6)

1. Geologicheskiy institut Akademii nauk SSSR. Predstavлено
академиком А.Л.Яншиным.
(Kharbey Valley--Geology, Stratigraphic)
(Khanmey Valley--Geology, Stratigraphic)
(Metamorphism (Geology))

KHERASKOV, N.P.; PERFIL'YEV, A.S.

Basic characteristics of geosyncline structures in the Ural Mountains.
Trudy GIN no.92:35-63 '63. (MIRA 17:10)

PERFIL'YEV, A.V.

Conference on the exchange of experience and modern technique.
Vod. i san. tekhn. no.10:40-41 '59. (MIRA 13:1)
(Water-supply engineering--Congresses)

PERFIL'YEV, B. V.

Geological Time

Study of the silting of basins and absolute geochrony. Izv. Vses. Geof. olshch., ..., No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress
October 1952. UNCLASSIFIED.

PERFILYEV, B. V.

USSR/Biology - Microbiology

Card 1/1 Pub. 22 - 39/47

Author : Perfilyev, B. V.

Title : New biological type of predatory bacteria

Periodical : Dok. AN SSSR 98/5, 845-848, Oct 11, 1954

Abstract : The characteristics of a new biological type of predatory bacteria "Dictyobacter", discovered in fresh-water muddy deposits around the Leningrad region, are described. Six references: 4-USSR; 1-Austrian and 1-German (1911-1951). Drawing; illustrations.

Institution : ...

Presented by : Academician V. N. Sukachev, August 11, 1954

PERFIL'YEV, Boris Vasil'yevich; GABE, Dina Bufinovna; OSTROUMOV, B.A., prof.,
otv. red.; VIKHNEN, S.D., red. Izd-va; ZAMIRAYEVA, R.A., tekhn.red.

[Capillary methods of studying micro-organisms] Kapilliarnye metody
izuchenija mikroorganizmov. Moskva, Izd-vo Akad. nauk SSSR, 1961.
534 p. (MIRA 14:5)

(Soil micro-organisms)

PERFIL'YEV, E.A., tekhnik

Balancing of the traction motor armature on the MS-25 balancing stand. Elek. i tepl. tsiaga 5 no.12:12-14 D '61. (MIRA 15:1)

1. Depo Moskovka Zapadno-Sibirskoy dorogi.
(Balancing of machinery)
(Armatures)

POLETIKA, Mikhail Fedorovich; PERFIL'YEV, G.L., inzh., retsenzent;
DUGINA, N.A., tekhn. red.

[Devices for measuring cutting forces and torques] Pribory
dlia izmereniiia sil rezaniia i krutiashchikh momentov. Mo-
skva, Mashgiz, 1963. 105 p. (MIRA 16:4)
(Dynamometer)

PERFIL'YEV, G. L. (Sverdlovsk)

New general purpose measuring device and methods of measuring the operational control of metal cutting machine.
Avtom.i telem. 21 no.6:884-891 Je '60. (MIRA 13:7)
(Machine tools) (Electronic measurements)
(Automatic control)

PERFIL'EV, G. L. and V. M. BARANOV.

Elektroiskrovaya obrabotka metallov. Sverdlovsk, Mashgiz, 1948.
46 p. diagrs.

Electric spark technique in metal working.

DLC: TN686.B3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of
Congress, 1953.

PERFIL'YEV, G.L.; SEREBRENNIK, Yu.B.

Automatizing the control of the dimensions of parts during
the machining process on universal lathes. [Ind] LONITOMASH
24:53-62 '51. (MIRA 8:2)

1. Ural'skiy politekhnicheskiy institut.
(lathes)

KUKLIN, L.G.; PERFIL'YEV, G.I.

Method for measuring residual stresses in the surface layer of
parts formed by milling. Zav.lab.22 no.11:1350-1352 '56.
(DIRA 10:2)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova.
(Strains and stresses) (Metals--Testing)

PERFIL'YEV, G.N. (Kuybyshev)

Z.P.Solov'ev in the period of the First Russian revolution. Sov.
zdrav. 20 no.1:50-55 '61. (MIRA 14:5)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. A.M.Aminev)
Kuybyshevskogo meditsinskogo instituta.
(SOLOV'EV, ZINOVII PETROVICH, 1876-1926) (PUBLIC HEALTH)

PERFIL'YEV, G.N. (Kuybyshov)

Utilization of amniotic membranes for the treatment of burns.
Eksper.khir. 4 no.4:54-55 Jl-Ag '59. (MIRA 12:11)
(BURNS surgery)
(AMNIOTIC transapl)

PERFIL'YEV, G.N. (Kuybyshev)

Revolutionary activities of Z.P. Solov'ev; 30th anniversary of
his death (1876-1928). Sov.zdrav. 18 no.4:25-29 '59.

(MIRA 12:4)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. A.M. Aminev)
Kuybyshevskogo meditsinskogo instituta.
(BIOGRAPHIES,

Solove'ev, Z.P. (Rus))

PERFIL'YEV, I.A. (deceased)

Dwarf birch in the Archangel tundras. Bot. zhur. 48 no.8:
1138-1150 Ag '63. (MIRA 16:10)

(Archangel region--Birch)

L 63771-65 EMT(1) GW

ACCESSION NR: AR5018980

UR/0169/65/000/007/D018/D018

550.830(574)

40
G

SOURCE: Ref. zh. Geofizika, Abs. 7D118

AUTHOR: Tsaregradskiy, V.; Perfil'yev, L.; Ben'kovich, S.

TITLE: Use of digital computers in processing results of geophysical observations in Kazakhstan

12,49, 5

CITED SOURCE: Byul. nauchno-tekhn. inform. Gos. geol. kom-t SSSE. Otd. nauchno-tekhn. inform. VIEMSa, no. 3(53), 1964, 55-59

44,55

TOPIC TAGS: geophysical data integration, computer program application, digital computer, magnetic surveying, gravity surveying, seismologic surveying

TRANSLATION: Digital computers are employed at the Kazakhskiy geofizicheskiy trest (Kazakh Geophysical Trust) in large-scale processing of results of observations and interpretation of geophysical data. Capability of the units ranges from 100 to 20,000 operations per second. Calculation programs were evolved for Ural-1 and Ural-2 units, to be used in obtaining solutions to a number of inverse problems on gravitational and magnetic surveys, as well as direct and inverse problems on seismological surveying. Programs compiled

Card 1/2

L 63771-65

ACCESSION NR: AR5018930

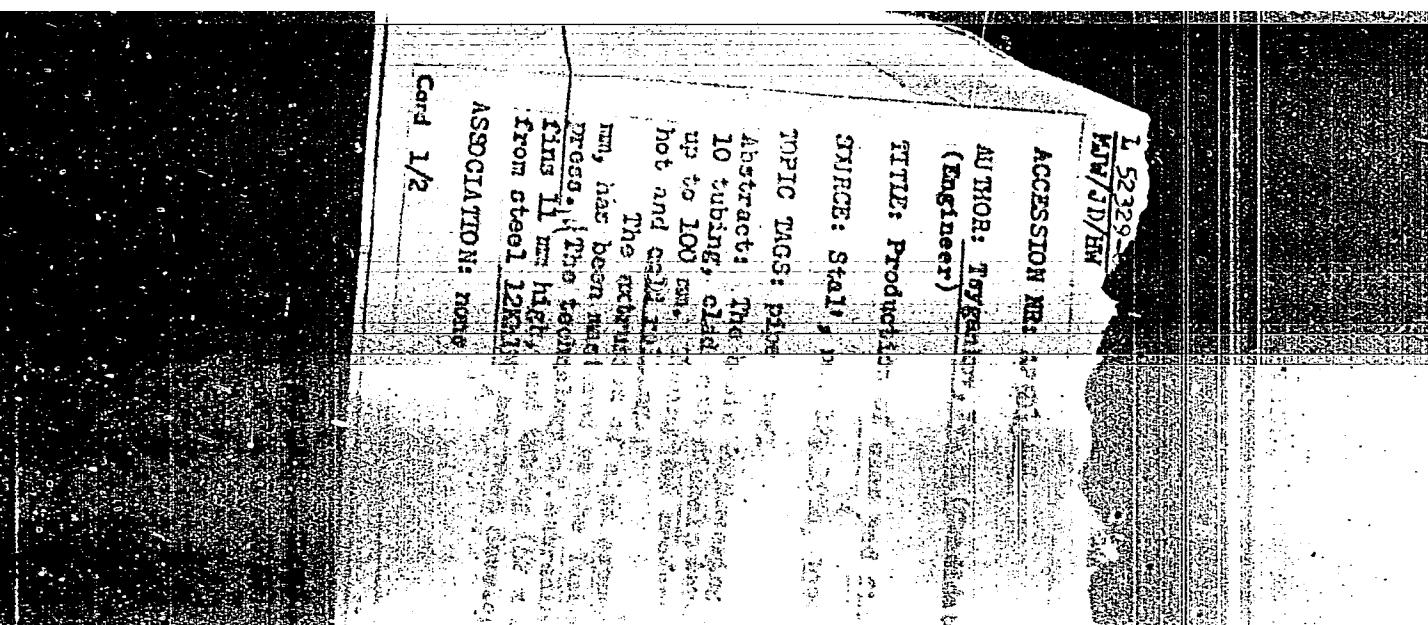
at SO AN SSSR found widespread application. A. Kunina.

SUB CODE: DP, ES

ENCL: 00

Card

2/2



AM/JD/RW	SW()/SW(U)/SWA(C)/SWP(t)	PT-4/Pad	IJP(c)
ACCESSION NR: AP9015684	UR/0133/64/010/012/1099/1099	31	
AUTHOR: Tsygankov, Ye. M. (Candidate of technical sciences); Porfil'yev, L. A. (Engineer)		30	B
TITLE: Production of clad and finned tubing			
SOURCE: Stal', no. 12, 1964, 1099			
TOPIC TAGS: pipe steel			
Abstract: The basic engineering parameters for the production of steel-10 tubing, clad with nickel, were determined for tubing with a diameter up to 100 mm. Tubing was produced from clad billets by extrusion and hot and cold rolling.			
The extrusion of clad copper-steel tubing, measuring 60-66 x 6-7 mm, has been mastered at the Yuzhnortrubnyy Plant on a 1500-ton vertical press. The technology of extruding tubing (42 x 5 mm) with two external fins 11 mm high, and tubing (42 x 4 mm) with 11 internal fins 5 mm high from steel 12Kh1MF has been developed.			
ASSOCIATION: none			
Card 1/2			

L 52329-65

ACCESSION NR: AP5015684

SUBMITTED: 00

ENCL: 00

SUB COME: NM, IX

NO REF SOV: 000

OTHER: 000

JPRS

Bi metals 18

Card 2/2 MB

TSYGANKOV, Ye.M., kand. tekhn. nauk; PERFIL'YEV, I.A., inst.

New developments in research. Staff 24 no.11:104. 1968.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9

135mm film, 36 exposures

2000 bytes of data, 1000x1000 pixels

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9"

L 17081-65 ENT(m)/EWA(d)/T/EWP(t)/EWP(k)/ENF(b) Pf-4 MFA/JD/HM

S/0133/64/000/012/1134/1134

ACCESSION NR: AP5000562

AUTHOR: Tsygankov, Ye. M. (Candidate of technical sciences); Perfil'yev, L. A.
(Engineer)

TITLE: Development of manufacturing methods for new steel and alloy tubes

SOURCE: 'Stal', no. 12, 1964, 1134

TOPIC TAGS: tube manufacturing, rolling, steel alloy, EI943 steel, EI448 steel,
EP375 alloy, EI695R steel, EI756 steel, EP184 steel, EP363 steel, tube billet,
tube shell, cast shell

ABSTRACT: Seamless tubes from hard-to-deform steels and alloys such as EI943,
EI448, and EP375 are made from centrifugally cast shells which are hot rolled in
an automatic or pilger mill and then warm and cold rolled to a desired diameter and
wall thickness. Experimental lots of EI695R, EI756, EP184, and EP363 steel tubes
were rolled at the Yuzhnorubnyy Plant. Alloy, cast-iron tubes can also be made
from cast shells by cold rolling with up to 20% reduction per pass.

ASSOCIATION: none

Card 1/2

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9

L 17061-65

ACCESSION NR: AP5000562

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF SQV: 000

OTHER: 000

ATD PRESS: 3148

Card 2/2

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9"

L 52328-65 EWP(k)/ESP(z)/EWA(c)/EMT(d)/EMT(m)/EWP(h)/EWP(b)/EWA(d)/EWP(x)/EMT(v),
EWP(t) Pp-k JD/HW

ACCESSION NR: AP5015686

UR/0133/64/C00/012/1129/1129

AUTHOR: Tsygankov, Ye. M. (Candidate of technical sciences); Perfil'yev, L.A. (Engineer)

TITLE: Production of ballbearing steel tubing

SOURCE: Stal', no. 12, 1964, 1129

TOPIC TAGS: pipe, steel, metal rolling, rolling mill

Abstract: The technology of producing ballbearing steel tubing on the 200 mill at the Plant imeni K. Libknekht (with a three-high rolling mill) has been developed. A graphical system of determining the adjustment parameters of three-high mills has been developed and introduced. Rolling of tubing with diameters from 76 to 140 mm and diameter-to-wall thickness ration of 6-10 has been mastered. Cold rolling and heat treating processes have been improved for producing pipe on the 200 mill.

8
B

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF Sov: 000

OTHER: 000

JPRS

Card 1/17 1/4

L 16009-65 ENT(m)/EWA(d)/ENT(t)/EWP(k)/E&P(b) Pf-1 ESD(t)/AEDC(a)/AFIC(c)
ACCESSION NR: AP4048662 JD/HW S/0133/64/000/011/1051/1051

AUTHOR: Taygankov, Ye. M. (Candidate of technical sciences);
Perfil'yev, L. A. (Engineer)

TITLE: Vacuum rolling of tubes

SOURCE: Stal', no. 11, 1964, 1051

TOPIC TAGS: tube, seamless tube, steel, alloy, rolling, vacuum,
pilger mill, rolling mill

ABSTRACT: A vacuum pilger mill has been designed for rolling tubes
from steels and alloys which require very high rolling temperatures
and can be contaminated with oxygen or other gases. The mill, which
is fully automatic, has a very small vacuum chamber in which tubes
are heated, rolled, and cooled; it can roll tubes 4—7 m long,
57—89 mm in diameter, and with a 2—10-mm wall thickness.
Heat resistant steels /8

ASSOCIATION: none

Card 1/2

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9

L 16009-55

ACCESSION NR: AP4048662

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, 12

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3145

Card 2/2

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240030002-9"

L 15157-65 EWT(m)/EWA(d)/EMP(t)/EMP(k)/EMP(b) Pf-4 ASD(f)-2/ASD(m)-3/
AFMDC/AFTC(p) JD/HW

S/0133/64/000/011/1051/1051

ACCESSION NR: AP4048661

AUTHOR: Tsaygankov, Ye. M. (Candidate of technical sciences);
Perfil'yev, L. A. (Engineer)

TITLE: Warm rolling of stainless-steel tubes

SOURCE: Stal', no. 11, 1964, 1051

TOPIC TAGS: stainless steel, tube, rolling, warm rolling, cold
rolling

ABSTRACT: An improved process for warm rolling stainless-steel tubes has been developed. The improvements include: better distribution of reductions along the deformation zone, improved die design, a new lubricant applied by immersion instead of the method of manual painting used previously, improved mounting of the inductors which heat the tube, a power supply using a high-frequency generator for two inductors, and contactless measuring of temperature in the deformation zone. Twenty-four mills of the Yuzhnotrubnyy, Novotrubnyy, and Sinarskiy Plants are using the new technique.

Card 1/2

L 15157-65

ACCESSION NR: AP4048661

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tehnologicheskiy institut trubnoy promyshlennosti (All-Union Design-Engineering and Scientific Research Institute of the Tubing Industry)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3144

Card 2/2

TSYGANKOV, Ye.M., kand. tekhn. nauk; PERFIL'YEV, L.A., inzh.

New developments in research. Stal' 24 no.12:1134 D '64.

New developments in research. Ibid.:1129

New developments in research. Ibid.:1099

(MIRA 18:2)

5-4700
5-2200(A)

67945

5(4)

AUTHORS: Smirnov, M. V., Nichkov, I. F.,
Raspopin, S. P., Perfil'yev, H. V.

S/020/60/130/03, 027/065
B004/B011

TITLE:

Investigation of the Thermodynamics of the Reaction

$\text{UO}_2(\text{s}) + \frac{1}{2}\text{C}(\text{gr}) + \text{Cl}_2(\text{g}) = \text{UOCl}_2(\text{s}) + \frac{1}{2}\text{CO}_2(\text{g})$ by the method of the
Method of Electromotive Forces

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 3, pp 501-504
(USSR)

ABSTRACT:

It had been stated in earlier papers (Refs 1-3) that electrodes pressed from metal oxides and carbon are reversible with respect to the corresponding cation in chloride melts. This allows their utilization for investigating the thermodynamic processes and some reactions by measuring the emf. The authors had found in reference 1 that ThOCl_2 in melts of chlorides or chlorides and fluorides are practically insoluble. They accepted this for UOCl_2 as well and investigated the reaction between uranium dioxide carbon electrodes and melts of alkali chlorides containing UCl_4 . By measuring the temperature de-

Card 1/4

67945

Investigation of the Thermodynamics of the
Reaction $\text{UO}_2(\text{s}) + \frac{1}{2}\text{C}(\text{gr}) + \text{Cl}_2(\text{g}) =$
 $\text{UOCl}_2(\text{s}) + \frac{1}{2}\text{CO}_2(\text{g})$ by Means of the Method of Electromotive Forces

S/020/60/130/03/027/065
B004/B011

pendence of the emf in elements of type $\text{UO}_2 + \text{C} + \text{UOCl}_2$ |
melt $\text{NaCl} + \text{KCl} + \text{UCl}_4 | \text{Cl}_2$, C, the change ΔZ of the isobaric
potential of the reaction mentioned in the title was determined.
The production of the uranium dioxide and carbon electrodes
pressed with 4000 kp/cm² is described. The molar ratio
 $\text{UO}_2 : \text{C}$ was varied between 1 : 1.6 and 1 : 200. The electrolyte
was either a eutectic mixture of $\text{LiCl} + \text{KCl}$ or an equimolar
mixture of $\text{NaCl} + \text{KCl}$. The UCl_4 dissolved in this melt was
purified by a repeated distillation in vacuum. A lead standard
electrode was used. The electrolytic cell (Fig 1) was situated
in a metal block which was heated by an automatically con-
trolled electrical resistor furnace. The emf ϵ between the di-
oxide-C electrode and the lead electrode was measured until a
constant equilibrium value appeared. This depended solely on
the temperature, at which the experiment was made; however, it

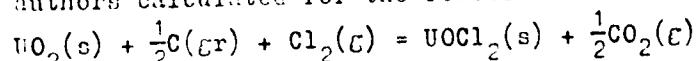
Card 2/4

67945

Investigation of the Thermodynamics of the
 Reaction $\text{UO}_2(\text{s}) + \frac{1}{2}\text{C}(\text{gr}) + \text{Cl}_2(\text{g}) =$
 $\text{UOCl}_2(\text{s}) + \frac{1}{2}\text{CO}_2(\text{g})$ by Means of the Method of Electromotive Forces

S/020/60/130/05/027, 065
 B004/B011

occurred the earlier, the higher the temperature and the UCl_4 content in the melt (Fig 2). With high UCl_4 content in the melt, the electrode is destroyed. The appearance of the equilibrium potential corresponds to the reaction $\text{UO}_2(\text{s}) + \text{UCl}_4(\text{melt}) \rightleftharpoons 2\text{UOCl}_2(\text{s})$. Experimental data are on the straight line $\varepsilon = (0.713 + 4.6 \cdot 10^{-4}T)\nu$ (Fig 3). Herefrom, the authors calculated for the reaction



$\Delta Z = (-32900 - 2.2T)$ cal/mol UOCl_2 , and the heat effect

$\Delta H = -32.9$ kcal/mol UOCl_2 as well as the entropy

$\Delta S = 2.2$ cal/degree.mol UOCl_2 . The formation heat and the entropy of the UOCl_2 were calculated on the strength of the thermodynamic data offered in reference 9: $\Delta H_{\text{UOCl}_2}^{\circ} =$

$$= -255.9 \text{ kcal/mol}, \quad S_{\text{UOCl}_2}^{\circ} = 49.2 \text{ cal/degree.mol}$$

Card 3/4

Investigation of the Thermodynamics of the
Reaction $\text{UO}_2(\text{s}) + \frac{1}{2}\text{C}(\text{gr}) + \text{Cl}_2(\text{g}) =$
 $\text{UOCl}_2(\text{s}) + \frac{1}{2}\text{CO}_2(\text{g})$ by Means of the Method of Electromotive Forces

67945

S/020/60/130/03, 027/065
B004/B011

value for the formation heat is in good agreement with the
data of reference 7, whereas entropy differs considerably.
This could be explained by a different structure of the UOCl_2
forming under the authors' experimental conditions. There are
3 figures and 9 Soviet references.

ASSOCIATION: Institut elektrokhimii Ural'skogo filiala Akademii nauk SSSR
(Institute of Electrochemistry of the Ural Branch of the
Academy of Sciences, USSR)

PRESENTED: September 19, 1959 by V. I. Spitsyn, Academician

SUBMITTED: September 18, 1959

W

Card 4/4

GOROKHOV, I., inzh. (Zhdanov); GRANKOV, L., inzh. (Zhdanov); RAKHMANOV, N.,
inzh.-mayor, izobretatel'; BASKAKOV, Yu. (Chernogorsk); PERFIL'YEV,
N. (Moskva); GLINCHEVSKIY, V. (Penza); KORNEV, M., inzh. (Kiyev);
MIKHAREV, P., konstruktor (Orenburg); D'YACHKOV, M. (Irkutsk)

How interesting! Izobr.i rats. no.1:19 '63. (MIRA 16:3)

1. Nachal'nik Penzenskogo byuro po delam ratsionalizatsii
i izobretatel'stva (for Glinchevskiy).

(Technological innovations)

ACCESSION NR: AP4018363

S/0120/64/000/001/0053/0056

AUTHOR: Vikin, B. P.; Perfil'yev, L. P.

TITLE: Use of a combined-coincidence gamma spectrometer in the analysis of complicated decay modes

SOURCE: Pribory* i tekhnika eksperimenta, no. 1, 1964, 53-56

TOPIC TAGS: gamma spectrometer, spectrometer, decay mode, complicated decay mode, Compton electron, Compton electron elimination

ABSTRACT: A method for the observation of a combined-coincidence spectrum for the lowest levels of nuclei having a complicated decay mode is described. An outfit of β , γ , E_{γ} -coincidence is offered; here, E_{γ} is the energy of the highest level equal to the sum of the energies of two cascade γ -quanta when that level is discharged, and β is part of the continuous beta-spectrum. The outfit permits observing only that part of the gamma-spectrum which is determined by the

Card 1/2

ACCESSION NR: AP4018363

number of recorded isotope levels. The number of levels is preselected which makes the use of a combined-coincidence gamma spectrometer possible. A spectrum of $\beta\gamma(\gamma_1 + \gamma_2)$ coincidence of $\text{Eu}^{152+154}$, was obtained with the summator aligned to the energy of the 1,124-kev level; the discriminator threshold in the beta channel was 220 kev. A spectrum with Σ , about 170 kev was also obtained. Orig. art. has: 4 figures.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: 28Mar63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: NS

NO REF SOV: 002

OTHER: 001

Cord 2'2

L 47208-66 EWT(d)/EWP(1) IJP(c) BB/GG
ACC NR: AR6027180 SOURCE CODE: UR/0271/66/000/005/A026/A026

AUTHOR: Yampol'skiy, V. Z.; Perfil'yev, L. V.

3/
E

TITLE: Code -to-voltage converter ¹⁶⁶ with semiconductor triodes

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 5A174

REF SOURCE: Izv. Tomskogo politekhn. in-ta, no. 138, 1965, 115-123

TOPIC TAGS: semiconductor triode, code converter

ABSTRACT: A code-to-voltage converter on a semiconductor triode base has been investigated. The device has keys according to the number of code discharges and the "weight" resistances. When load parameters and values of standard voltage potential are selected properly, the device's error does not exceed 0.5%. Orig. art. has: 5 figures. [Translation of abstract] [NT]

SUB CODE: 14/

Cord 1/1 fv

UDC: 62-52:681.142.621

L 48970-65 EWT(m)/ZWG(m)/T RWE

ACCESSION NR: AP5007751

S/0364/65/001/001/0090/0093

AUTHOR: Perfil'yev, M. V.; Pal'guyev, S. F.; Karpachev, S. V.

TITLE: Impedance of the electrode-electrolyte interface and the double layer capacity in solid electrolytes

SOURCE: Elektrokhimiya, v. 1, no. 1, 1965, 90-93

TOPIC TAGS: electrode, electrolyte, platinum, impedance

ABSTRACT: The alternating current method of studying aqueous and fused electrolytes was used to investigate the electrode processes in solid electrolytes. Cells of the type Pt, O₂|solid electrolyte|O₂, Pt were used in the 700-800°C temperature range. The electrolyte was a solid solution of 0.15 CaO·0.85CeO₂. The cell made in the form of a cylinder with pointed conical depressions at the ends. The operating electrode was platinum applied as powder on the surface of the central cylinder. An auxiliary electrode was applied on the external surface of the cylinder. Prior to the measurements the electrode was treated with a current having a density of not less than 0.5 a/cm². A bridge was used for the measurements which made it possible to perform measurements in a frequency range of from 20 cycles to 20 kilo-

Card 1/3

L 48970-65

ACCESSION NR: AP5007751

cycles with a voltage amplitude in the cell of 20 millivolts. The resistance of the electrolyte was measured with a cathode oscillograph. The resistance was 35-40 Ω and the accuracy of measurement was on the order of 1-2 Ω . All measurements were made at the equilibrium potential of the oxygen electrode being investigated. The results of the measurements are shown in table 1 of the Enclosure where $\Delta\phi$ is in millivolts and C is in $\mu\text{f}/\text{cm}^2$. Orig. art. has: 2 figures, 1 table, 4 equations.

ASSOCIATION: Institut elektrokhimii Ural'skogo filiala Akademii nauk SSSR
(Institute of Electrochemistry, Ural Branch, Academy of Sciences SSSR)

SUBMITTED: 01Sep64

ENCL: 01

SUB CODE: GC, IC

NO REF SOV: 008

OTHER: 003

Card 2/3

L 38371-66

EWT(m)/T/EWP(t)/ETI

IJP(c)

DS/JD

ACC NR: AT6021372

(A)

SOURCE CODE: UR/2631/65/000/007/0157/0162

AUTHOR: Perfil'yev, M. V.; Pal'guyev, S. P.

ORG: none

41
5+

TITLE: Electrode polarization in solid electrolytes. Establishment of the potential of oxygen electrodes on platinum when the polarization current is switched on

SOURCE: AN SSSR. Ural'skiy filial. Institut elektrokhimii. Trudy, no. 7, 1965. Elektrokhimiya rasplavlennykh soleykh i tverdykh elektrolitov; termodinamika i kinetika elektrodykh protsessov (Electrochemistry of fused salts and solid electrolytes; thermodynamics and kinetics of electrode processes), 157-162

TOPIC TAGS: electrode potential, platinum, electric polarization, oxygen

ABSTRACT: The cell

Pt, O₂ | solid electrolyte | O₂, Pt

was studied at 670-1000°C. The electrolytes used were solid solutions of the composition 0.15CaO-0.85CeO₂ and 0.15CaO-0.85ZrO₂. Polarization was induced, and it was measured by using the equations:

$$\eta_a = U_a - IR_a$$

Card 1/2

Card 2/2 mcl

L 38370-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS/JD/JG

ACC NR: AT6021373 (A)

SOURCE CODE: UR/2631/65/000/007/0163/0168

39
B+1

AUTHOR: Perfil'yev, M. V.; Pal'guyev, S. F.

ORG: none *

TITLE: Electrode polarization in solid electrolytes. Polarization of the platinum oxygen electrode

SOURCE: AN SSSR. Ural'skiy filial. Institut elektrokhimii. Trudy, no. 7, 1965. Elektrokhimiya rasplavlenyykh soleykh i tverdykh elektrolitov; termodinamika i kinetika elektrodnykh protsessov (Electrochemistry of fused salts and solid electrolytes; thermodynamics and kinetics of electrode processes), 163-168

TOPIC TAGS: platinum, electric polarization, electrode potential, calcium compound, strontium compound, cerium compound, lanthanum compound

ABSTRACT: The dependence of the anodic and cathodic polarization of a platinum oxygen electrode on the current density and the change of the electrode potential with time after the current was switched off were studied. The measurements were made at 650-900°C in cells of the type



The activation energy of oxygen evolution at the anode in solid electrolytes of the

Cord 1/2

PERFIL'YEV, M.V.

Use of a cathode ray switch for studying rapid electrode processes.
Trudy Inst. elektrokhim. UFAN SSSR no.5:167-172 '64.
(MIRA 18:2)

PERFIL'YEV, M.V.; FAL'GUYEV, S.F.; KARPACHEV, S.V.

Impedance of the electrode - electrolyte interface and the capacity
of the double layer in solid electrolytes. Elektrokhimiia 1 no.1:
90-93 Ja '65. (MIRA 18:5)

. Institut elektrokhimi Uralskogo filiala AN SSSR.

PERFIL'YEV, M.V.; PAL'GUYEV, S.F.

Electrode polarization in solid electrolytes. Pts. 1-2.
Trudy Inst. elektrokhim. UFAN SSSR no.6:107-121 '65.
(MIRA 18:11)

CHUCHKALOV, A.; KOPOSOV, N.; PERFIL'YEV, N.; MAKAROV, V.; GUBANOV, A.;
YEGOROV, L.; CHUZHMIK, A., aspirant

Creative initiative of the masses and the establishment of norms.
Sots. trud 8 no.9:87-97 S '63. (MIRA 16:10)

1. Starshiy instruktor otdela proizvodstvennoy raboty i zarabotnoy platy Altayskogo promyshlennogo krayevogo soveta professional'nykh soyuzov (for Chuchkalov).
2. Nachal'nik byuro tekhnicheskoy informatsii Leningradskogo vagonostroitel'nogo zavoda im. I.Ye.Yegorova (for Koposov).
3. Zamestitel' nachal'nika otdela organizatsii truda Cherepovetskogo metallurgicheskogo zavoda (for Perfil'yev).
4. Nachal'nik otdela truda i zarabotnoy platy Lyublinskogo liteyno-mekhanicheskogo zavoda (for Makarov).
5. Starshiy inzh. Lyublinskogo liteyno-mekhanicheskogo zavoda (for Cubanov).
6. Starshiy inzh. otdela truda i zarabotnoy platy Ural'skogo turbomotornogo zavoda (for Yegorov).
7. Ural'skiy universitet (for Chuzhmir).

L 45967-66 EWT(1)/EWT(m) SCTB JKT/DD/RD/JT/GD
ACC NR: AT6030696 SOURCE CODE: UR/0000/66/000/000/0052/0055

AUTHOR: Perfil'yev, N. P.; Men'shova, V. M.; Golov, V. K.

43
42
B+1

ORG: none

TITLE: Air dessication in cabin-atmosphere life-support systems ✓

SOURCE: Konferentsiya po kosmicheskoy biologii i meditsine, 1964. Materialy. Moscow, Inst. mediko-biol. problem, 1966, 52-55

TOPIC TAGS: life support system, space biology

ABSTRACT: A diffusion method for dessicating air in a cabin-atmosphere regeneration system is shown in Fig. 1. In this system, moist cabin air is fed through the

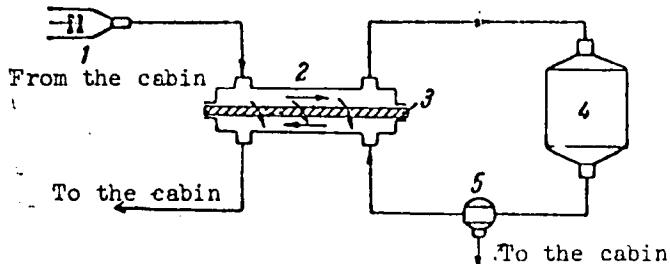


Fig. 1. Schematic diagram of a diffusion method of air drying

1 - Ventilator; 2 - diffusion dryer;
3 - porous membrane; 4 - regenerator;
5 - bypass valve.

Card 1/2

L 45967-66

ACC NR: AT6030696

ventilator (1) into the upper part of the diffusion dryer (2). The air is then passed to the regenerator-absorber (4), where carbondioxide, harmful impurities, and some water vapor are removed. The purified and dried air is then passed through the lower part of the diffusion dryer back to the cabin. The regenerator-absorber may contain a peroxide substance, plates of potassium carbonate, or zeolite.¹ When the dry air is passed back through the diffusion dryer, a moisture concentration gradient is set up through the porous membrane, resulting in the preliminary dessication of the moist, incoming air. A bypass valve (5) regulates the amount of dry air passed through the diffusion dryer. The membrane in the diffusion dryer must pass water vapor and be sufficiently strong (silica gel cannot withstand vibration). The capacity and efficiency of the diffusion dryer can be calculated taking into account the volume of the airflow, its temperature, and the vapor permeability and surface area of the porous membrane. Orig. art. has: 2 figures. [JS]

SUB CODE: 06/ SUBM DATE: 14Apr66/ ATD PRESS: 5086

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Card 2/2

DEVZNER, M.I.; KHRIZ'EV, O.G.; POCHIVAKOV, I.N.; BORTNIKOV, A.V.;
SOKOLOV, A.

Industrial test in pebble mill grinding of gold containing ores
at the S Ordzhonikidze plant in the Baleyzoloto Combine.
Tsvet. met. 38 no.6:6-11 Ju '65. (MIRA 18:10)